

**SYSTEM AND METHOD FOR MULTIPLEXED
FREQUENCY AND TIME DATA TRANSMISSION**

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ABSTRACT OF THE DISCLOSURE

- Wireless communications devices (102, 104, 106) that communicate via an adaptive bandwidth communications protocol (300). Wireless devices (102, 104, 106) utilize a multiple carrier time division/frequency division multiplexing format where time slots (330, 332) are adaptively assigned across multiple RF carriers.
- 10 Preferred embodiments assign time coincident time slots (330, 340, 350, 360) on multiple RF carriers so as to allow shorter transmission and reception times and therefore shorter transmitter and receiver activation times in order to conserve power in portable devices (104, 106). Time slots are adaptively assigned and deallocated in response to events that alter communications bandwidth requirements.